Elite 2- NVR8004X – 20 Ch. NVR

4-Bay, Up to 20-Channel Megapixel Recording, RAID Storage

Quick Installation Guide

EverFocus®

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Release Date:December, 2014

Notice: This content is subject to be changed without notice.

Warranty

Based on the RMA policy, EverFocus Electronics Corporation ("EverFocus") will repair or replace, at no charge to the purchaser, any merchandise found to be defective in material or workmanship.

The NVR hardware is covered with a 2-year limited hardware warranty.
The supplied adaptor is covered with a1-year limited hardware warranty.

Safety Precautions

- It is strongly recommended to use the Local Display only for short-term operation, such as system configurations. To ensure better system efficiency, the Local Display is not recommended for long term operation or video monitoring.

- Refer all work related to the installation of this product to qualified service personnel or system installers.

- Do not block the ventilation openings or slots on the cover.

- Do not drop metallic parts through slots. This could permanently damage the appliance. Turn the power off immediately and contact qualified service personnel for service.

- Do not attempt to disassemble the appliance. To prevent electric shock, do not remove screws or covers. There are no user-serviceable parts inside. Contact qualified service personnel for maintenance. Handle the appliance with care. Do not strike or shake, as this may damage the appliance.

- Do not expose the appliance to water or moisture, nor try to operate it in wet areas. Do take immediate action if the appliance becomes wet. Turn the power off and refer servicing to qualified service personnel. Moisture may damage the appliance and also may cause electric shock.

- Do not use strong or abrasive detergents when cleaning the appliance body. Use a dry cloth to clean the appliance when it is dirty. When the dirt is hard to remove, use a mild detergent and wipe gently.

- Do not overload outlets and extension cords as this may result in a risk of fire or electric shock.

- Do not operate the appliance beyond its specified temperature, humidity or power source ratings. Do not use the appliance in an extreme environment where high temperature or high humidity exists. Use theNVR at temperatures within 0°C~40°C / 32°F~104°F (Storage). The input power source is 19 VDC / 90W.

- **Read Instructions**
  All the safety and operating instructions should be read before the unit is operated.

- **Retain Instructions**
  The safety and operating instructions should be retained for future reference.

- **Heed Warnings**
  All warnings on the unit and in the operating instructions should be adhered to.

- **Follow Instructions**
  All operating and use instructions should be followed.

- **Cleaning**
  Unplug the unit from the outlet before cleaning. Do not use liquid cleaners, abrasive or aerosol cleaners. Use a damp cloth for cleaning

- **Attachments**
  Do not use attachments not recommended by the product manufacturer as they may cause hazards.

- **Water and Moisture**
  Do not use this unit near water-for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, near a swimming pool, in an unprotected outdoor installation, or any area which is classified as a wet location.

- **Servicing**
  Do not attempt to service this unit by yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

- **Power Cord Protection**
  Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, playing particular attention to cords and plugs, convenience receptacles, and the point where they exit from the appliance.

- **Object and Liquid Entry**
  Never push objects of any kind into this unit through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the unit.

ATTENTION! This is a class A product which may cause radio interference in a domestic environment; in this case, the user may be urged to take adequate measures.

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the users' authority to operate this equipment.

This Product is RoHS compliant.

WEEE

Your EverFocus product is designed and manufactured with high quality materials and components which can be recycled and reused. This symbol means that electrical and electronic equipment, at their end-of-life, should be disposed ofseparately from your household waste. Please, dispose of this equipment at your local community waste collection/recycling centre. In the European Union there are separate collection systems for used electrical and electronic product.
Please, help us to conserve the environment we live in!

The information in this manual was current upon publication. The manufacturer reserves the right to revise and improve his products. Therefore, all specifications are subject to change without prior notice. Manufacturer is not responsible for misprints or typographical errors.
Please read this manual carefully before installing and using this unit. Be sure to keep it handy for later reference.

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Chapter

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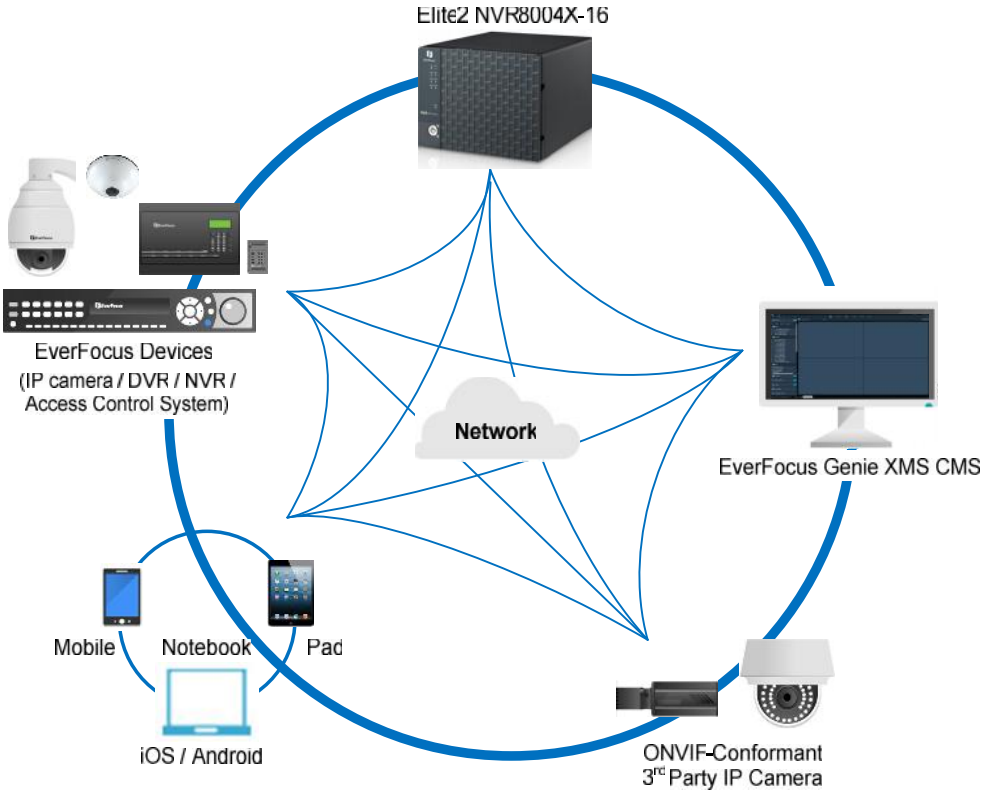
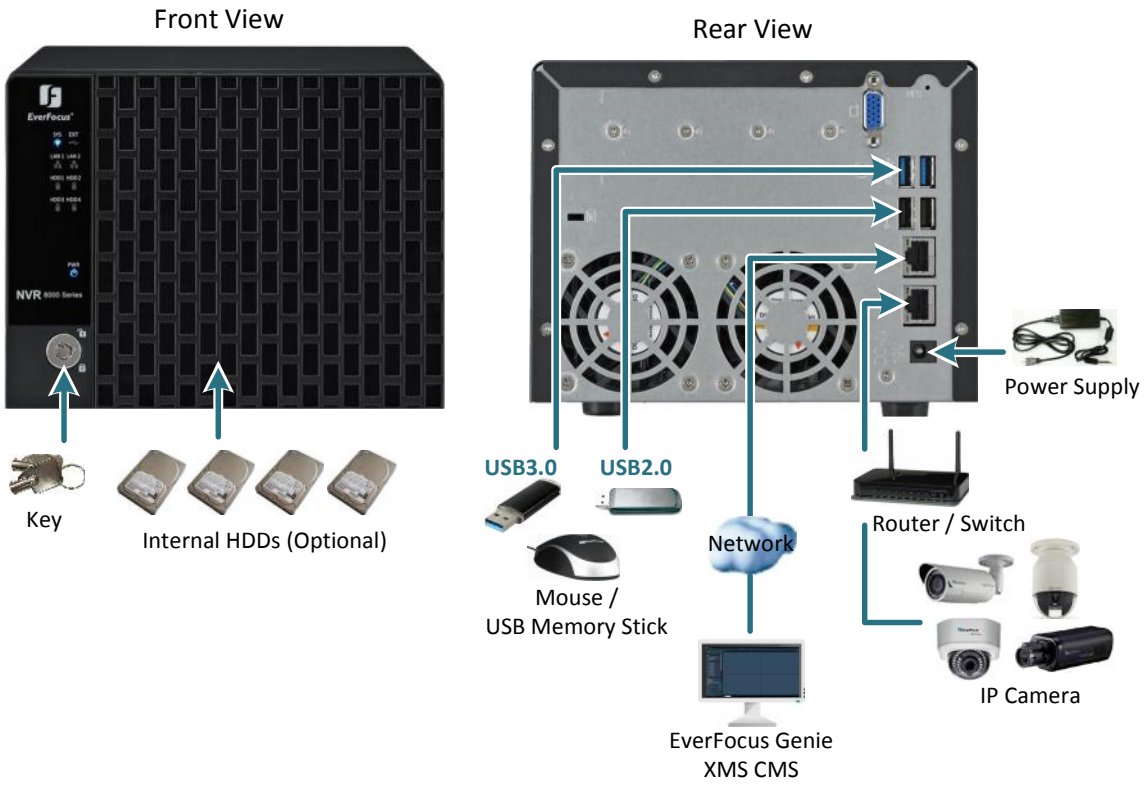
1. Introduction

EverFocus Elite2-NVR8004X is a professional standalone network video server designed for small and medium-sized businesses (SMB) and enterprises, supporting 20 channels. Featured with 4-bay hot swappable SATAIII HDDs and RAID 0,1,5,6 and 10functionality with the highest data protection.It offers megapixel recording as well as playback and also supports industry standard compression codec H.264.

Operating on a Linux-based system that is free from PC crash and virus attack, the Elite 2 - NVR8004Xprovides a storage capacity of up to 16 TB (2TB or 4 TB per drive). Additionally, the NVR is compatible with all EverFocus devices such as IP cameras, DVR, NVR, access control systems and EverFocus CMS software, Genie XMS. The ONVIF-conformant 3rd-party cameras can also be connected to the NVR. Industry standard video compression formats, such as H.264, MPEG4 and M-JPEG (depends on IP cameras) are all supported.The Elite2 is also fullysupported by EverFocus MobileFocus apps on iOS and Android devices extendingvideo surveillance from fixed locations to mobile environments.



1.1 Overview



1.2 Supporting Operating Systems and Browsers

- Operating System: Microsoft Windows XP (32-bit) / 7 (32/64-bit) / 8 (32/64-bit)
- Preferred Web Browser: Google Chrome

1.3 Features

- Elite 2can support20 channels
- 4 HDD Bays with removable hot swap trays
- Dual NIC for separation of streaming camera video from LAN/ WAN monitoring network
- Built-in web server for single NVR live/playback viewing and configuration
- Raid: 0,1, 5, 6and 10 configurable
- Free multi-site CMS displays live and playback video for up to 32live and 16 playback cameras (dual monitors permit 2 x 16live views; playback screen replaces one live view) from any combination of Elite 2 and Commander 2

1.4 Packing List

• NVR x1	• Quick Guide x 1
• Power Cord x 1	• Adaptor x 1
• Key x2 *see note 4	• Sticker x 1 *see note 4
• Screw x 16 *see note 4	• Standard RJ45 cable x 1

Note:

1. Equipment configurations and supplied accessories vary by country. Please consult your local EverFocus office or agents for more information. Please also keep the shipping carton for possible future use.
2. Contact the shipper if any items appear to have been damaged in the shipping process.
3. Download the IP Utility software, EF Player, JAVA software, Quick Installation Guide, and User's Manual from EverFocus website: http://www.everfocus.com/product.cfm?productid=1856
4. The Sticker, Screws and Keys are contained in the HDD trays respectively.

1.5 Optional Accessory

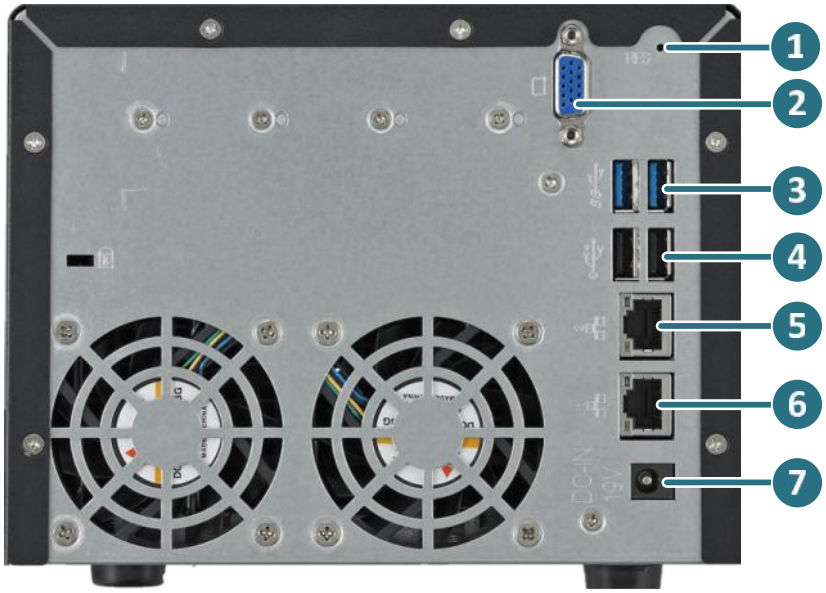
- EKB200 (USB controller keyboard: connect to the PC to control the PTZ cameras connected to the NVR).

1.6 Front Panel

No.	Name	Description
1	**Status LED**	**SYS:**Indicates the system is working. **EXT:**Indicates the NVR is connected to the external storage device. **LAN1 / LAN2:**Indicates the NVR is connected to the network. **HDD1~4:**Indicates the internal HDD is activating, but the LED indicators will lightup only if you install the HDDs before turning on the NVR. If the NVR is already on and you hot-swap the HDDs, the HDD1~4 LED indicators will still remain on / off as the previous status, please see the example in the note below. **PWR:** Indicates the power is on.
2	**Power**	Press to turn on / off the NVR.
3	**HDD Tray**	Pull the HDD trayout to install the HDD.
4	**Lock**	Use the supplied key to lock / unlock the NVR.

Note: For example, if the HDD1 is installed before turning on the NVR, the HDD1 LED indicators will emit light once the NVR is powered on. Then, if you hot-swap either one of HDD1~4, still only the HDD1 LED indictorremains light up. You can reboot the NVR manually and the HDD LED indication will be corrected.

1.7 Rear Panel



No.	Name	Description
1	**Reset**	Insert atool into the reset hole to reset the NVR.
2	**VGA Port**	**For configuration purpose only, not for live viewing.**
3	**USB3.0 Port**	The USB3.0 ports for connecting to a mouse or external storage device.
4	**USB2.0 Port**	The USB2.0 ports for connecting to mouse or external storage device.
5	**LAN2 (Static IP)**	Connects to the Network. Please see *2.2 Basic Connection*for more details.
6	**LAN1 (DHCP)**	Connects to a router or switch for connecting IP cameras. Please see *2.2 Basic Connection*for more details.
7	**Power Port**	Connects to the 19 VDC power using the supplied Power Cord.

Chapter

2

2. Installation

2.1 Hard Disk Drive Installation

1. Your HDD should be preinstalled when you receive the NVR.

Note: To replace new hard disks:

1. If RAID function is configured, assign this RAID disk to a single group first (see **To create a new group** in *4.3.2 Storage Device Management* of the Genie XMS software manual in the CD*)*, and then replace the new hard disk.
2. If RAID function is not configured, assign all the hard disks to a single group first (see **To create a new group** in *4.3.2 Storage Device Management*of the Genie XMS software manual in the CD*)*, and then replace the new hard disk.

2.1.1 Hard Disk Compatibility List

Please use the hard disk models recommended in the list below to ensure your hard disks will be compatible.

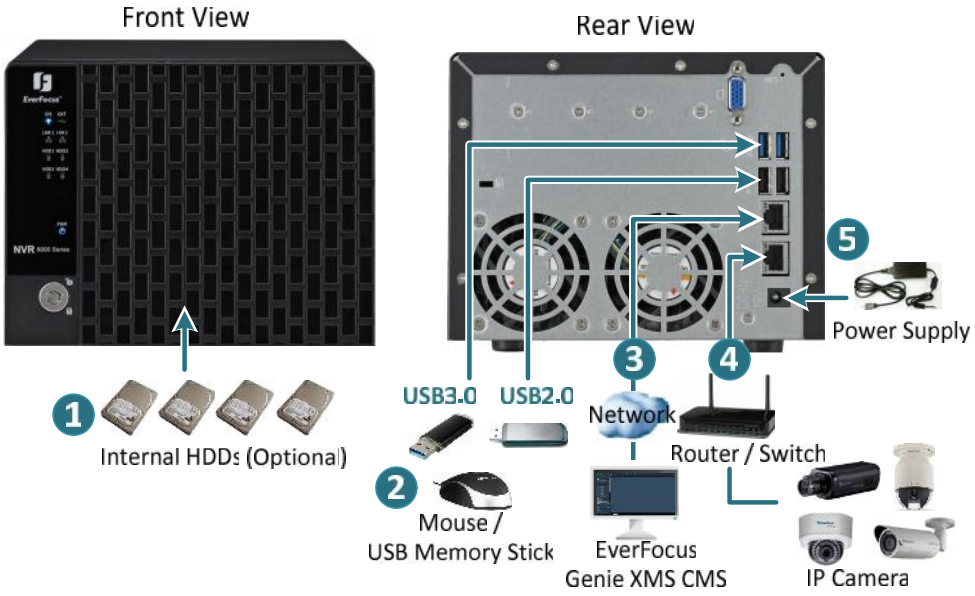
Note: If using two or more hard disks, please choose the hard disks with the same capacity.

SATA Hard Disk	Model	Capacity
Seagate	SV35.5 SATA2 ST3500410SV	500GB
	SV35.5 SATA2 ST31000525SV	1TB
	SV35.5 SATA3 ST3500411SV	500GB
	SV35.5 SATA3ST31000526SV	1TB
	SV35 SATA3ST2000VX002	2TB
	Constellation ES.3 SATA3 ST4000NM0033	4TB
	Constellation CS SED SATA3 ST3000NC000	3TB
	CE-Video SATA3 / ST3500312CS	500GB
	CE-Video SATA3 / ST1000VM002	1TB
	CE-Video SATA3 / ST2000VM003	2TB

	CE-Video SATA3 / ST3000VM002	3TB
	CE-Video SATA3 / ST4000VM000	4TB
	ST4000VX000	4TB
Western Digital	WD40PURX-64GVNYO	4TB
	WD30PURX-64P6ZY0	3TB
	WD20PURX-64P6ZY0	2TB
	WD10PURX-64D85Y0	1TB
	WD10EVDS SATA2	1TB
	WD10EURS SATA2	1TB
	WD10EURX SATA3	1TB
	WD20EVDS SATA2	2TB
	WD20EURS SATA2	2TB
	WD30EURS SATA2	3TB
	WD10EVVS SATA	1TB
	WD20EFRX	2TB
	WD30EFRX	3TB
	WD4001FAEX	4TB
	WD1600AVVS SATA	160GB
	WD3200AVVS SATA	320GB
	WD5000AVVS SATA	500GB
	WD7500AVVS SATA	750GB
	WD10EVVS SATA	1TB
Toshiba	MD03ACA200V	2TB
	MD03ACA300V	3TB
	MD03ACA400V	4TB
	DT01ABA050V	500GB
	DT01ABA100V	1TB
	DT01ABA200V	2TB
	DT01ABA300V	3TB
	MG03ACA100	1TB
	MG03ACA200	2TB
	MG03ACA300	3TB

2.2 Basic Connection

The instructions below describe theconnection for the Elite 2.



1. Optionally connect a Mouse and USB Memory Stick to the NVR.
2. To manage the NVR over network, it'srecommended to connect the supplied standard RJ-45 cable from your network to LAN2 port.
3. To connect IP cameras, please use a router or switch to connect between NVR and IP cameras. It's recommended to connect therouter or switch to the LAN1 of the NVR.
4. Using the supplied Power Cord, connect one end to the 19 VDC port on the NVR and the other end to the power outlet.

Note: Before powering on the NVR, please install the HDDs first. Please see 2.3*Turning On / Off the Power* for more details.

2.3 Turning On / Off the Power

Before powering on the NVR, please make sure the internal HDDs have been installed properly. When you have completed the basic cable connections, you are ready to turn on the NVR.

Once connect the supplied Power Cord to the power outlet, the NVR will be powered on.All of the LED indicators on the front panel will light up for a second, but theSystem andPower LEDwill remain light up. To turn off the power, simply unplug the Power Cord from the power outlet. You can also press the **Power** button inside the front panel to turn on and off the NVR without unpluggingthe Power Cord.

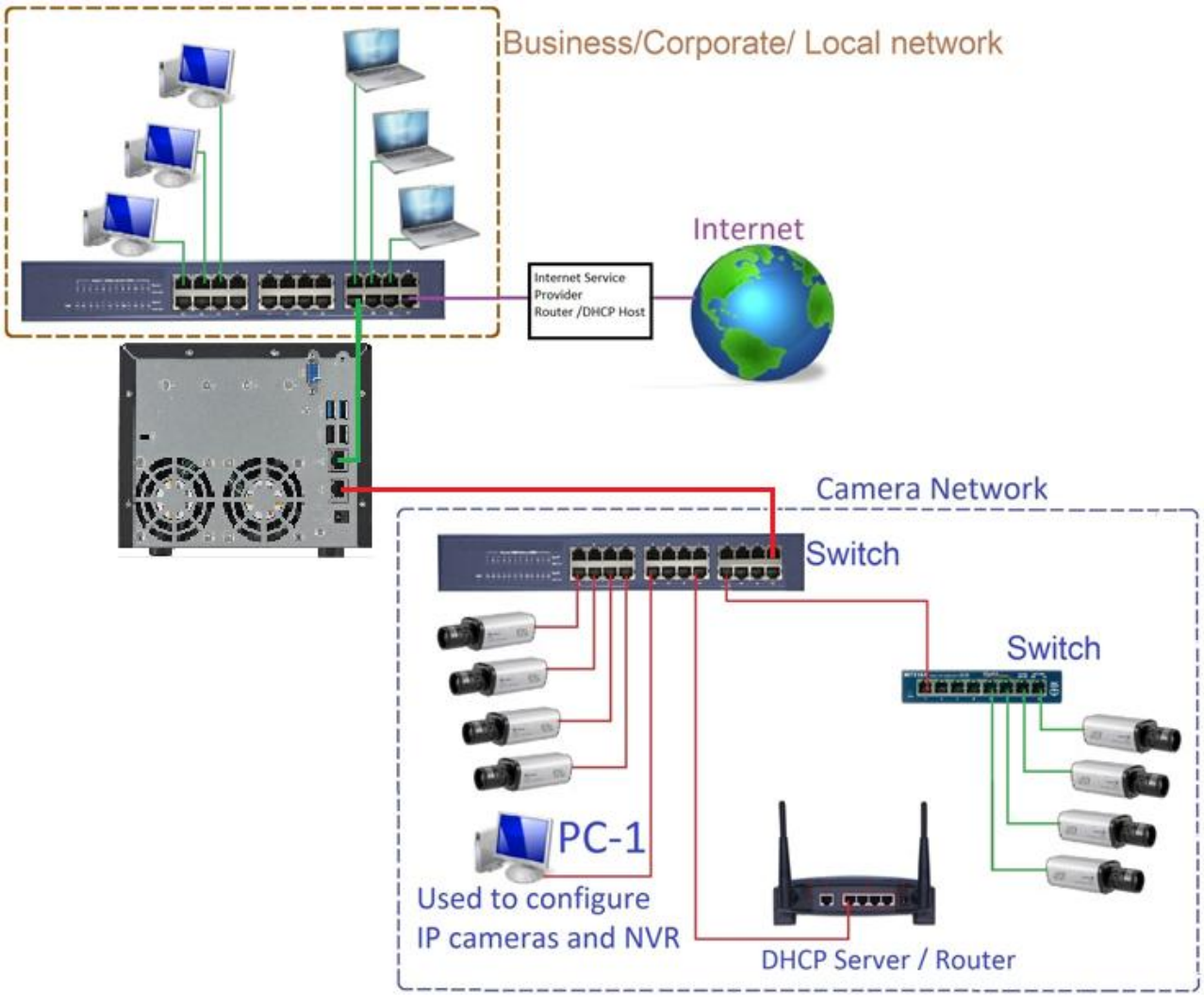
2.4 Connecting the NVR to the Network

The instructions below describe the basic connection for NVR8008X.

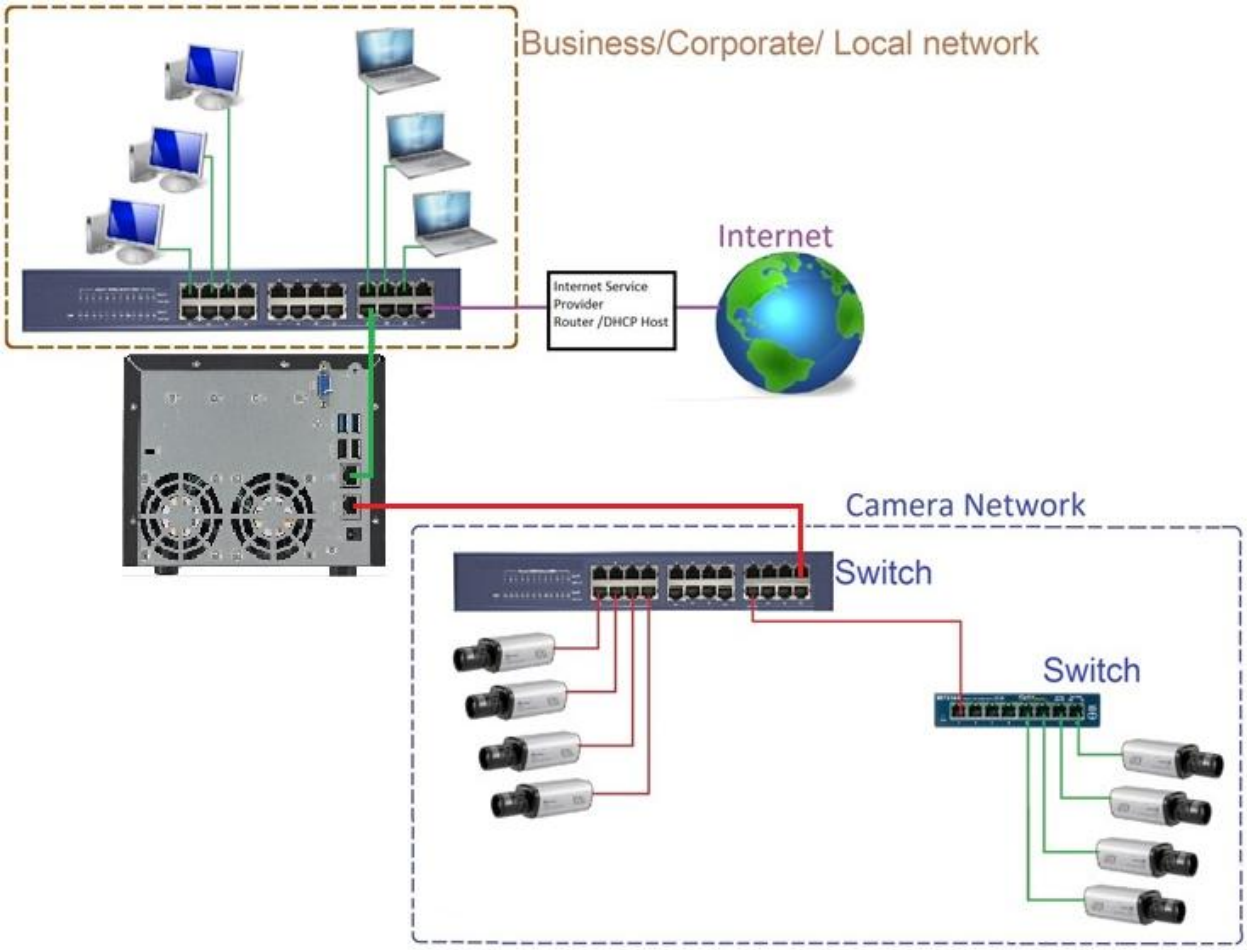
Before powering on the NVR, make sure the internal HDDs have been installed properly. When you have completed the basic cable connections, you are ready to turn on the NVR.

This NVR has dual network ports. It is recommended to separate your IP-camera network from your other network.

The diagram below is an example of an initial network set up.



Once NVR and IP camera configuration is complete, the DHCP Server/Router and PC-1 can be removed from the Camera Network.

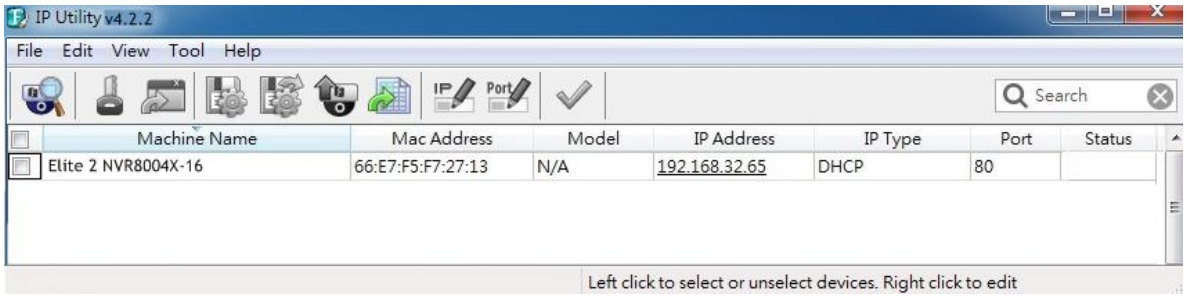


2.5 Checking the Dynamic IP Address

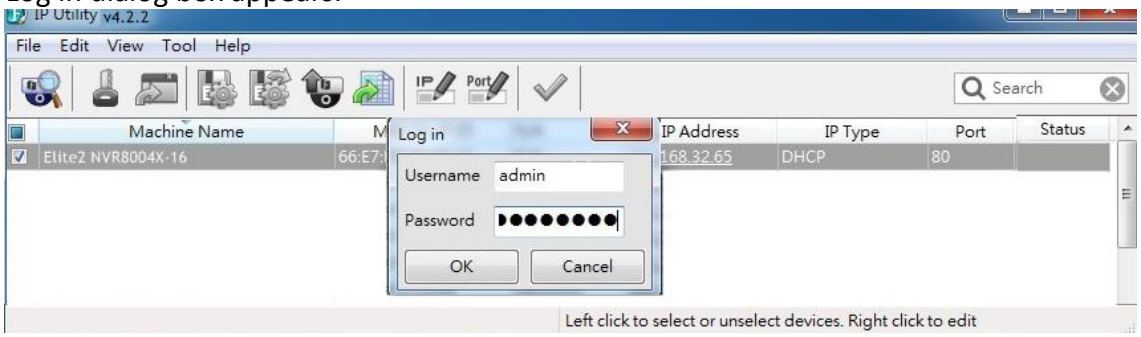
You can look up the IP address and access the Web interface of the NVR using the **IP Utility (IPU)** program. Please connect the NVR in the same LAN of your computer.

1. Save **IP Utility Setup AutoRun.exe** in your computer. Double click the .exe file and followthe on-screen instructions. Check **Run IPUtility.exe** and click the **Finish** button, the IP Utility willbe launched to search the IP devices connected in the same LAN automatically.

Setup - IP Utility
Completing the IP Utility Setup Wizard
Setup has finished installing IP Utility on your computer. The application may be launched by selecting the installed icons.
Click Finish to exit Setup.
Run IpUtility.exe
Finish



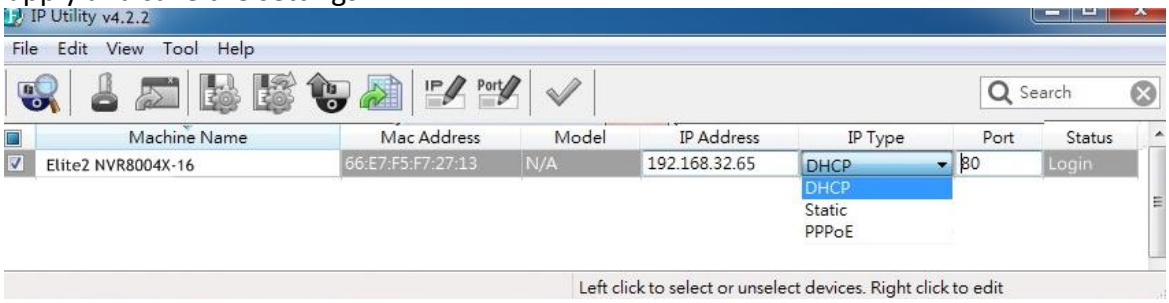
2. To optionally configure the Machine Name, IP Address, IP Type or Port Number using the IPU:
   a. Log in the NVR by checking the desired model and then click the **Log in** icon. The Log in dialog box appears.



b. Type the Username and Password. Click the **OK** button, the status of the selected camera will display **Login**.

Note:
1. The default user ID is **admin** and the default password is **11111111**.
2. If you select more than one NVRs that have the same user ID / password, you will be able to log in several NVRs at once.

c. Right click the column to configure the setting. Click **Apply Changes** button to apply and save the settings.



Note: Most networks uses DHCP to assign IP address, if you are unsure of your network settings, please consult your network administrators for configuration details.

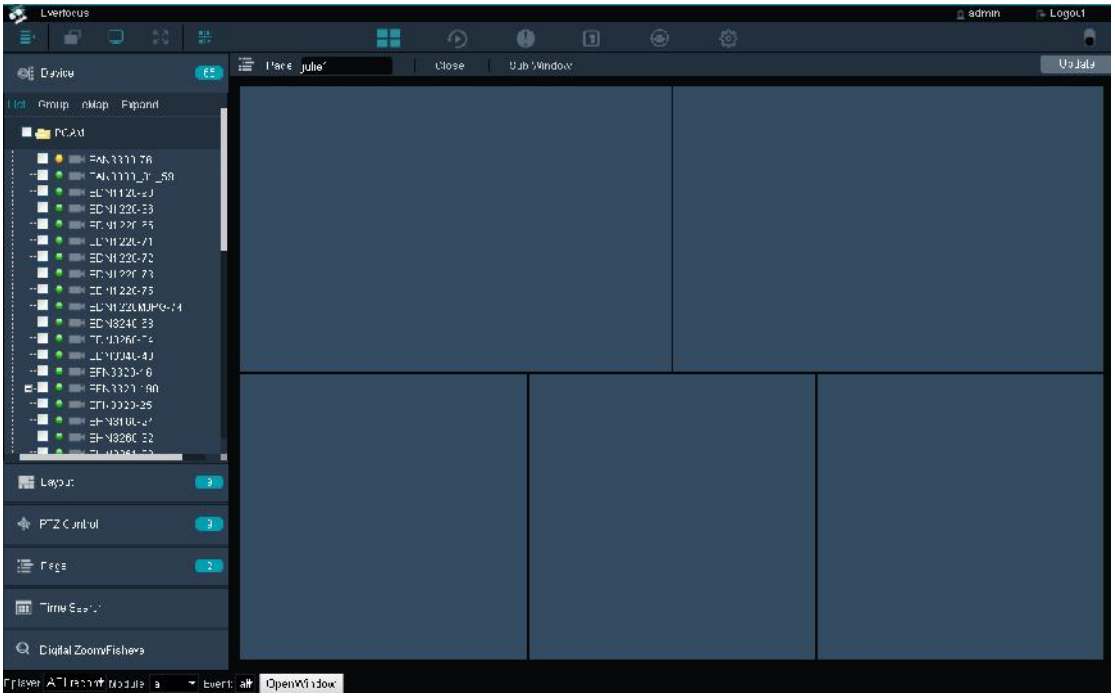
3. To access to the Live View window, open a Google Chrome Web browser, type the IP address of the NVR in the address field and press the **Enter** key on the keyboard, the Welcome window pops up. Follow the instruction steps to update the latest Plug-in version.

Welcome
Please follow the steps below to update the latest Plugin version
Step 1. Click here to download Eplayer
Step 2. Execute the EPlayer.exe file
Step 3. Click here to reload the webpage

Note: The Welcome window will only be prompted for the first time login in order to update the system to the latest plug-in version.

4. After reloading the webpage, the login window pops up. Type the user ID and password to log in. By default, the user ID is **admin**and the password is **11111111**.

5. Click the **Login** button, the Live View window appears.



Chapter
3

3. Specifications

Model	Elite 2 - NVR8004X
System	
Channels	20
OS	Embedded Linux
Recording Modes	Continuous record, record by schedule, event trigger record, digital input trigger record
Recording Resolution	Up to full camera resolution
Compression Supported	H.264
Audio	Bi-directional transmission, 1 audio channel per video channel (depending on specification of IP device)
Max Stream Limit	Live View up to 32Streams
Storage	
Internal HDD	4 SATA HDD bays with Removable Hot Swap Trays
Video Storage	up to 16TB
Raid	0,1, 5, 6, 10 configurable
Interface	
Network Interface	Gigabit RJ45 Ethernet Port x 2
Other Interface	USB 2.0 x 2; USB 3.0 x 2 (on back panel)
Alarm I/O	Dependent on supported camera
Function	
Event Trigger	Yes
E-Map	Supports E-map with device indicator
User Rights Management	Create unique user ID and password with user rights management for per camera live and/or playback access; restrict ability to backup and/or delete data
PTZ	PTZ Control of supported cameras
Recording Rate	Max 100Mbps, Max 30 FPS per camera
Multi-Channel Playback:	max 20 cameras simultaneous on screen
Video Export to:	Snapshot in JPEG format; video export in AVI format

Remote Video Access viaFree Client Software	Live view: Max 32 cameras (up to 2 windows with up to 16views on each monitor at 1 PC) Playback view: up to 16 cameras (replaces one Live Viewscreen during playback at PC) Mobile phone/PDA/tablet: free app with live multi views (Nolimit for number of installations for all remote applications)
Remote Maintenance	Internet Explorer 9 and later, Firefox 4.0-9.0, Chrome (Windows version)
General	
Power	DC 19VDC , 4.74A
Power Consumption	90W max; AC to DC power supply included with NVR
Temperature	32°F~104°F
Housing	Compact Desktop Lockable front door
Dimensions	140mm x 183mm x 219mm /5.51” x 7.16” x 8.62”
Weight	2.97kg / 6.55lb (without HDDs)
Certifications	CE, FCC

RemoteClientSystemMinimumRequirement	
OS	Windows XP (32-bit) / Win7 (32 and 64-bit)
CPU	Intel Core i3
RAM	2GB
LANTransmissionSpeed	10/100/1000 Mbps (RJ45)
WebClient	Internet Explorer 9 and later, Firefox 4.0-9.0, Chrome (Windows version)
Mobile iViewer	iPhone, iPad, Android

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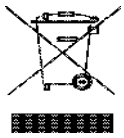

Your EverFocus product is designed and manufactured with high quality materials and components which can be recycled and reused.
This symbol means that electrical and electronic equipment, at their end-of-life, should be disposed ofseparately from your household waste.
Please, dispose of this equipment at your local community waste collection/recycling centre.
In the European Union there are separate collection systems for used electrical and electronic product.
Please, help us to conserve the environment we live in!

Ihr EverFocus Produkt wurde entwickelt und hergestellt mit qualitativ hochwertigen Materialien und Komponenten, die recycelt und wieder verwendet werden können.
Dieses Symbol bedeutet, dass elektrische und elektronische Geräte am Ende ihrer Nutzungsdauer vom Hausmüll getrennt entsorgt werden sollen.
Bitte entsorgen Sie dieses Gerät bei Ihrer örtlichen kommunalen Sammelstelle oder im Recycling Centre.
Helfen Sie uns bitte, die Umwelt zu erhalten, in der wir leben!

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